



CHEMISTRY, GRADES 9-12

EDUCATOR PREPARATION PROGRAM NAME WESTMINSTER COLLEGE	EDUCATOR PREPARATION PROGRAM CODE 049495
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INSTRUCTIONS

Please complete Educator Preparation Program (EPP) Name & EPP Code above.

Certification Requirements:

- Course Number – List the course number(s) for the course(s) or groups of competencies that align with the specific section of the requirements. It is possible to have more than one course or group listed.
- Course Title – List the course title(s) for the course(s) or groups of competencies that align with the specific section of the requirements. It is possible to have more than one course or group listed.
- Semester Hours – List the number of semester hours for each specific section. It is possible to use decimals (to the nearest tenth) to indicate partial use of a course to meet a requirement. The total number of semester hours must meet or exceed the minimum required number of semester hours.

Email the completed cover sheet, curriculum matrix, and advising/program information to DESE.MoSPETtransition@dese.mo.gov on or before the date established in the Transition Plan.

QUESTIONS: Contact Educator Preparation, 573-751-1668 or DESE.MoSPETtransition@dese.mo.gov

A. Professional Requirements (Minimum of 26 semester hours)

1. Content Planning and Delivery

	Course Number	Course Title	Semester Hours
a. Curriculum and Instructional Planning	EDU 101 EDU 436 EDU 306 EDU 425	Introduction to Teaching Teaching Science MS/Sec. Teaching Reading Secondary School Teaching	1 3 3 3
b. Instructional Strategies and Techniques in Content Area Specialty	EDU 436 EDU 306 EDU 425 EDU 290	Teaching Science MS/Sec. Teaching Reading Secondary School Teaching Foundations of Education	3 3 3 3
c. Assessment, Student Data, and Data-Based Decision-Making	EDU 436 EDU 306 EDU 425 EDU 290 EDU 393 EDU 490	Teaching Science MS/Sec. Teaching Reading Secondary School Teaching Foundations of Education Education Practicum 2 Education Seminar	3 3 3 3 2 3
d. Strategies for Content Literacy	EDU 436 EDU 306 EDU 425 EDU 392	Teaching Science MS/Sec. Teaching Reading Secondary School Teaching Reading and Writing in the Content Area	3 3 3 3
e. Critical Thinking and Problem Solving	EDU 436 EDU 306 EDU 425 EDU 393 EDU 490	Teaching Science MS/Sec. Teaching Reading Secondary School Teaching Education Practicum 2 Education Seminar	3 3 3 2 3
f. English Language Learning	EDU 385	Diversity in Education	3

2. Individual Student Needs

	Course Number	Course Title	Semester Hours
a. Psychological Development of the Child and Adolescent	EDU 230	Child and Adolescent Growth and Development	3
b. Psychology/Education of the Exceptional Child	EDU 231	Education of the Exceptional Individual	3
c. Differentiated Learning	EDU 231 EDU 392 EDU 490	Education of the Exceptional Individual Reading and Writing in the Content Area Education Seminar	3 3 3
d. Classroom Management	EDU 453	Classroom Organization and Management	3
e. Cultural Diversity	EDU 385	Diversity in Education	3
f. Educational Psychology	EDU 221	Education Psychology	3

3. Schools and the Teaching Profession

	Course Number	Course Title	Semester Hours
a. Consultation and Collaboration	EDU 290	Foundations of Education	3

b. Legal/Ethical Aspects of Teaching	EDU 290	Foundations of Education	3
4. Secondary Literacy (Minimum of six semester hours)			
	Course Number	Course Title	Semester Hours
a. Reading and Writing in the Content Area	EDU 392	Reading and Writing in the Content Area	3
b. Instructional Interventions for Students with Reading Deficits	EDU 306	Teaching Reading	3
Professional Requirements - Total Semester Hours			36
B. Field and Clinical Experiences (Minimum of ten semester hours)			
	Course Number	Course Title	Semester Hours
1. Early Field Experiences (Minimum of one semester hour with a minimum of 30 clock hours)	EDU 291	Education Practicum 1	2
2. Mid-Level Field Experiences (Minimum of one semester hour with a minimum of 45 clock hours)	EDU 393	Education Practicum 2	2
3. Culminating Clinical Experiences (Minimum of eight semester hours with a minimum of 12 weeks in one placement)	EDU 497	Student Teaching: Secondary	12
Field and Clinical Experiences - Total Semester Hours			16
C. Chemistry Content Knowledge Area (Minimum of 35 semester hours)			
	Course Number	Course Title	Semester Hours
1. History/Philosophy of Science and Technology (Minimum of three semester hours)	NSC 305	History of Science	3
2. Chemistry Coursework – Minimum of 20 semester hours which must include:			
a. Inorganic Chemistry	CHEM 114/115 CHEM 124/125	Gen Chem 1 w/ Lab Gen Chem 2 w/Lab	4 4
b. Analytical Chemistry	CHEM 334/335	Analytical Chemistry w/ Lab	4
c. Organic Chemistry	CHEM 314/315	Organic Chem 1 w/ Lab	4
d. Physical Chemistry	CHEM 424/425	Physical Chemistry w/Lab	4
e. Biochemistry	BIO 404	Biochemistry	4
f. Chemistry Electives	CHEM 324/325	Organic Chemistry 2 w/lab	4
3. Additional Science Coursework – Minimum of 12 semester hours which must include:			
a. Biology	BIO 114/15	Biological Processes w/lab	4
b. Physics	PHY 105 or PHY 201	Introduction to Physics or Physics 1	3 or 4
c. Earth Science	GEO 108 or GEO 110	Introduction to Physical Geology; or Earth Systems	4
d. Environmental Science	ENV 105	Introduction to Environmental Science	3
Content Knowledge Area - Total Semester Hours			45-46

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